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EXAMINER

HOM, SHICK C

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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09/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/283,125

Applicant(s)

PEARCE ET AL.

Examiner

Shick C. Horn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/8/03 and 8/9/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 6-9 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5 and 10-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 10-17, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Bellenger (5,949,786).

Regarding claims 1 and 10-15:

Bellenger discloses the ARP table data structure stored in a computer memory of a router, comprising:

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an entry for each station on a Source Route Bridge (SRB) subnet to which said router routes packets, said entry having a first field containing a Layer 3 address of each said station (col. 1 lines 19-35 and 41-59 recite the network router for directing traffic among interconnected networks, i.e. bridged networks, which use a variety of protocols whereby frame routing which is based on address information stored in each frame by analyzing the network layer, level 3 protocol or IP addresses clearly anticipate the SRB for routing packets including the use of the Layer 3 address), said entry having a second field containing a Layer 2 address of said station including a physical (MAC) address and routing information (RIF information) from said router to said each station (Fig. 2 shows the MAC address 102 and col. 4 line 57 to col. 5 line 16 recite the table stored in the router whereby each entry in the table includes routing information), said routing information in said second field of said ARP table used for

writing RIF information into a Route Information Field (RIF) in a message packet before routing said message packet to said SRB subnet for said each station (col. 1 line 52 to col. 2 line 5 recite the technique of source route bridging SRB including the step of inserting route information into the

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routing information field RIF of each source route data frame being send).

Regarding claim 15:

Bellenger discloses wherein said Layer 3 address further comprises an address for an Internet Protocol (IP) communication session (col. 1 lines 47-59 recite the Layer 3 address being an Internet Protocol address).

Regarding claims 16-17, and 19:

Bellenger discloses

wherein said Layer 3 address further comprises an address for an Apple talk communication session and wherein said Layer 3 address further comprises an address for an IPX communication session (col. 2 lines 25-35 recite the address for the Apple talk and IPX communication session as in claims 16 and 19); and

wherein said Layer 3 address further comprises: an address for a connectionless mode network service communication session (col. 1 line 66 to col. 2 line 6 recite connectionless mode network service communication session as in claim 17).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 18 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellenger (5,949,786) in view of Leong et al. (6,269,398).

Bellenger discloses all the subject matter of the claimed invention as describe in paragraph 3 of this office action with the exception that Bellenger did not recite address being for

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DECnet, XNS, and Vines Communication session as in claims 18 and 20-21.

Leong et al. teach that it is known to provide routers with a Simple Network Management Protocol SNMP having a manager, an agent, and a management information base MIB characterized as a request-response protocol whereby the agent generally acts gather information about its own device's internal workings and the network and stores the information in the MIB and using a connectionless protocol the manager requests and obtains information from the MIBs wherein the information obtained are the protocol types: (i) Internet Protocol (IP); (2) DECnet protocol (DN); (3) Xerox Network System (XNS); (4) AppleTalk (AT); (5) Novell Internet Packet Exchange (IPX) ; and (6) Banyan VINES as set forth at col. 1 line 56 to col. 2 line 11 and col. 9 lines 43-47 in the field of digital and multiplex communications for the purpose of providing the added feature of managing and monitoring routers for overseeing the operations and overall health of the network which clearly anticipate the Layer 3 address including address for DECnet, XNS, and Vines communication session as in claims 18 and 20-21. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Layer 3 address including the address for DECnet, XNS, and Vines communication session as

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taught by Leong et al. to the system of Bellenger because Leong et al. teach providing the desirable cumulative features of managing and monitoring routers for overseeing the operations and overall health of the network in Bellenger.

6. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellenger (5,949,786) in view of Hrastar et al. (6,272,150).

Bellenger discloses all the subject matter of the claimed invention as describe in paragraph 3 of this office action with the exception that Bellenger did not recite using a FLASH memory to store data received by a processor from a network connection for maintaining the ARP table as in claims 22 and 23.

Hrastar et al. teach that it is known to load data and programs received in IP packets via cable or telephone line into Flash RAM as shown in Fig. 5 including the step of executing the ARP protocol, which translates an IP address into a link-level address of the link-level network that the host is connected to and the use Of an ARP cache, which is a table of the current mappings between IP addresses Of hosts in the link-level network and the link-level addresses of those hosts as set forth at col. 16 line 37 to col. 17 line 2 in the field of digital and

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multiplex communications for the purpose of providing the added feature of hierarchical displays for network management in order to make better decisions regarding causes and effect of anomalies in the network and improving understanding of the network for growth planning, potential failure scenarios, routing diagnostic tests, maintenance and the like which clearly anticipate using a FLASH memory to store data received by a processor from a network connection for maintaining the ARP table as in claims 22 and 23. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a FLASH memory to store data received by a processor from a network connection for maintaining the ARP table as taught by Hrastar et al. to the system of Bellenger because Hrastar et al. teach the desirable cumulative features of providing hierarchical displays for network management in order to make better decisions regarding causes and effect of anomalies and improving Understanding for growth planning, potential failure scenarios, routing diagnostic tests, maintenance and the like of the network in Bellenger.

Allowable Subject Matter

7. Claims 3 and 6-9 are allowed.

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mathur discloses a store-and-forward network switch using an embedded DRAM; see col. 11 line 66 to col. 12 line 14; claims 11 and 20.

Sasaki et al. disclose a network control method and apparatus therefor.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pham Chi can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SH

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CHI PHAM
SUPERVISORY PATENT EXAMINER

8/28/07